

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY**

**A COMPUTER-BASED LIBRARY REFERENCE SYSTEM**

**By Mary E. Graziani and Olaf Kays**

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**Open File Report 86-003**

**Reston, Virginia  
1986**

*A COMPUTER-BASED LIBRARY REFERENCE SYSTEM  
OPEN FILE REPORT 86-003*

Revision Notes - February 1989

- o This system requires the following hardware/software components:

PC compatible computer, preferably with a 20mb or more hard disk  
DOS operating system software  
dBase III+ (or it could be upgraded to dBase IV) software  
Printer which can print continuous-feed card stock (if you wish to keep a  
author/title/subject card file) as well as single sheet and continuous feed paper

- o Since Open File Report 86-003 was issued we have upgraded our software to dBase III+. We will be happy to supply you with a diskette with the upgraded programs if you will contact us at the following address:

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USGS Office of Geographic & Cartographic Res.  
MS-521 National Center  
Reston, VA 22092

Telephone: (703) 648-4559 OR FTS 959-4559

If you have specific questions about using this library reference system please do not hesitate to contact me at the above address and/or phone.

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## ABSTRACT

The U.S. Geological Survey National Mapping Division's Office of Research established a reference collection to supplement the Geological Survey Library's reference works in the fields of traditional and automated cartography, geography and geographic information systems, remote sensing technology, photogrammetry, surveying and map projections.

At the time of its establishment, the core of the Office of Research reference collection consisted of approximately 3,000 works that were not cataloged or indexed. To make the materials more accessible, a traditional card catalog was created, using a microcomputer to facilitate the printing of the cards and to provide an automated means for machine searching and printing of bibliographies, accession lists, and other publications. To generate the card catalog, several commercial and public-domain computer programs were tested, but none fully answered the needs of the office. An experiment with dBase II, a general-purpose data base management program, was conducted and proved successful. The file structure and some of the principal command files used to develop the computer-based library reference system are described in this publication.

## INTRODUCTION

In 1982 the U. S. Geological Survey National Mapping Division's Office of Research established a reference collection to provide access to scientific and technical reports, publications, and information pertinent to its research aims. This reference collection is supplemental to the Geological Survey Library collections. The functions of the reference collection staff are to:

1. Provide and maintain a current collection of materials, including research publications in the fields of geography, cartography, digital cartography, and automated geographic information systems, remote sensing technology, photogrammetry, surveying, and map projections; texts and tutorials in these disciplines; meeting and conference proceedings; bibliographies; atlases; periodicals; and an archival collection of staff reports on research, experiments, and maps.

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2. Acquire new or additional materials in these categories and maintain them for reference use.
3. Provide reference services and assistance to the NMD Office of Research staff.

The core of the reference collection consists of approximately 3,000 volumes that have accumulated over a period of some years and new publications and periodicals which are ordered or donated by staff members.

To help accomplish these aims, it was decided to use the Survey Library's subject classification system and the Anglo American Cataloging Rules (AACR-II) to prepare catalog entries for all of the collection and additions to it. A computer-based catalog system was also investigated to facilitate creation of the catalog entries and cards; to permit machine searches of the data file; to provide machine-produced reference lists and bibliographies; and to make the reference data base as flexible and accessible as possible.

Thus, the search began for a data base system that would accommodate the entry of standard bibliographic information based on the AACR-II Rules and yet be flexible and simple enough for general use. An Intertec Compustar Model 30 microcomputer with a 10-megabyte hard disk attachment was available for use to base such a system. The first bibliographic software tested was an off-the-shelf commercial system, which proved to be too limited for the stated needs. Subsequently, a reference was found to a bibliographic software system developed by the National Bureau of Standards--the KGS Data Base System--and a copy was obtained from one of the authors, L. J. Kaetzel. This data base software was loaded for experimental purposes on a Perkin-Elmer computer. Unfortunately, the maximum data field sizes were inadequate for the AACR-II entries and the response time on the Perkin-Elmer computer was slow. Therefore, the search continued for a good bibliographic data base system and several commercially available systems were investigated. Unfortunately, none was found that exactly met the office's software, hardware, and budget constraints.

## DEVELOPMENT OF THE SYSTEM

dBase II was already available on the Compustar for other purposes and an experiment was conducted to see if it could be used for bibliographic applications. The dBase II management system is made up of about 70 commands. These can be issued interactively, one at a time, by the user, or a sequence of commands can be stored in a command file through the use of a text editor or word processor. The command file allows the sequence to be repeated over and over again, thereby giving dBase II the power of a programming language. It differs from a programming language in that the commands are executed directly. It is not necessary to write source code, then compile and link edit the source code to produce an executable object module.

dBase II also allows the use of format files, full screen editing, and subsidiary command files. The subsidiary command files are equivalent to the standard procedures or sub-routines used in programming languages.

A command file was written to overcome the limitations of dBase II's fixed-field, fixed-record length structure and to allow the combining of data fields into the longer text strings required for catalog cards and bibliographic citations. With this command file, dBase II was able generally to meet our requirements.

The bibliographic system developed by the Office of Research requires a working knowledge of dBase II. The majority of processing functions use standard dBase II commands for creating files, appending data, editing data, copying and backing-up files, searching files, and generating simple listings as well as performing other housekeeping operations necessary with any computer data base. The generation of extended text, as in catalog cards and citations, requires the use of command files, including the one mentioned above.

A basic file structure was developed that allows for bibliographic entries using the revised Anglo-American Cataloging Rules. The longest command line or text string that dBase II can accommodate is 254 characters. Since the record length used in the NMD bibliographic data base is 999 characters, command files are needed to format the data for printout. The key to this printout is CARD1.CMD, a generalized typesetting command file that trims and formats fixed-field data into paragraphs. It is used as a subroutine by other command files. These other command files select records to be printed, sequence data fields, supply additional punctuation, spacing, and line feeds, and display or print the results.

After the initial file structure has been created and data have been entered into the file using standard dBase II commands, the file can be edited, searched for a particular data entry, and printed out either as cards or bibliographic lists.

For anyone who can write dBase II command files, it is quite feasible to use entirely different data structures for a bibliographic data base and incorporate CARD1.CMD into the revised printout and display programs. Note, however, that these command files have been written using dBase II on an Intertec Compustar Model 30 with a 10-mb hard disk. Ashton-Tate has changed some command words and syntax in their dBase III system, therefore, conversion of these programs to dBase III for use with an IBM-PC or (or IBM-compatible) microcomputer would require more effort.

## DESCRIPTION OF FIELDS

Class, cutter, and workmark refer to alphanumeric identifiers known as call numbers on a library card. The classification number is assigned from the Survey Library classification scheme according to the subject of the work. Each publication is assigned a cutter number from the 1969 edition of C. A. Cutter's Three-Figure Author Table. The cutter and workmark numbers aid in shelving the publications within each subject classification. The workmark is an additional identifier and may be the initial letter from the title of a work to differentiate between two works by the same author, the year of publication, or the volume number. **Main:entry** refers to the primary location of a work in the catalog and may be the primary author, the publisher if no author is named, or the

**Table 1.—Research reference collection dBase II bibliographic data structure**

Field	Name	Type	Width
001	Class	C	007
002	Cutter	C	007
003	Workmark	C	007
004	Main:Entry	C	120
005	Title	C	120
006	Auth:Edit	C	110
007	Place	C	040
008	Publisher	C	075
009	Date	C	012
010	Collate	C	030
011	Series	C	070
012	Notes	C	100
013	*S1	C	050
014	S2	C	050
015	S3	C	050
016	S4	C	050
017	S5	C	050
018	S6	C	050
Total			999

\*S1, etc., refer to added entries or subject references.

title of the work. The **Title** field is where the title normally will be placed. However, this field is left blank when the **Main:entry** is the title. The **Auth:edit** field allows for additional author information, such as multiple authors, as well as an edition statement. Collate contains data on the number of pages, volumes, and other physical information about the work. The **Series** field gives information about the work when it is part of a series. Notes allow for supplemental information to be added to the entry that might be of interest. **Subject** or **Added entries** are listed in fields S1 through S6. This overall format provides for standard library cataloging.

The master computer catalog is being built-in increments. After each increment of new catalog entries has been proofed for errors, edited, corrected, and printed on card stock for the catalog and shelf list files, it is appended to the master catalog file. The process then begins again with a new increment of cataloged entries.

#### DESCRIPTION OF COMMAND FILES

The dBase II **CREATE** command is used to set up the file and to modify the structure as desired.

To enter new bibliographic records, the dBase II APPEND command is used after the file has been created. For our purposes, some of the AACR-II punctuation requirements have been programmed in the main:entry, title, and auth:edit fields. This punctuation is not shown on the display screen but is printed out when one of the print programs is used. Punctuation is not programmed in the collate field. When subject or added entries are typed in the record, they must include an Arabic or Roman numeral, a period, and a dash before the subject data; for example: 1-Computer programming. The catalog-generating program CARDFORM uses this sequence of characters to format the subject/added entries part of the catalog card.

The dBase II EDIT command is used to edit or correct catalog entries before they are printed on card stock for the catalog and shelf list files.

### PROOF.CMD Screen Displays and Printout

The PROOF.CMD command file is used to print a sequential list of entries in a new catalog increment before it is appended to the master file and cards are printed for the catalogs. This list differs from the BRLIST.CMD command file in that it includes the record number for each entry to facilitate correcting or editing the entries.

#### Example of Screen Displays

. DO PROOF

```
[                                     PROOF.CMD                                     ]
[ Prints out main entry card with record number. Used for proofing new          ]
[ entries.                                                                      ]
[-----]
[ Set up NEC Spinwriter as follows:                                           ]
[   Form length = 66                                                         ]
[   Line feed = 6 (switch down)                                              ]
[   Character spacing = 12 (switch up)                                        ]
[   Use 12-pitch typing element                                              ]
[   Turn NEC Spinwriter on                                                  ]
[                                                                              ]
[ Strike any key when ready..... ]
```

```
[ Do you want to see what dBASE II files are available? (Y or N)? : Y        ]
[                                                                              ]
[ Enter letter designator of disk containing dBASE II bibliographic files    ]
[   - usually "B" for floppy disks,                                         ]
[   - or "D" for hard disk                                                  ]
[   - do not use colon (:)                                                  ]
[ Disk to be used :D ]
```



DATABASE FILES	# RCDS	LAST UPDATE
NEWGEOG1 DBF	00565	05/20/85
NEWGEOG DBF	00566	05/20/85
GEOG DBF	00067	05/15/85
NEWGEOG2 DBF	00565	05/20/85
GEOG3 DBF	00007	00/00/00

[ Enter name of file to be used  
 [ File may be sequential or indexed, example:  
 [ FILENAME (for sequential file)  
 [ FILENAME INDEX INDEXNAME (for indexed file)  
 [ File to be used :NEWGEOG

### Example of Printout

759	Campbell, James B.	1
C152m	Mapping the land: aerial imagery for land use information. / James B. Campbell.--Washington, D.C.: Association of American Geographers, 1983. viii, 96 p.: ill.: maps; 22 cm (Resource Publications in Geography) Includes bibliography, p. 90-94.  1.--Land use- Remote sensing 2.--Cartography- Land use 3.--Remote sensing- Land use I.--Title	
036.9	Sobell, Mark G.	2
So12	Practical guide to the UNIX system/ Mark G. Sobell. Menlo Park, CA: Benjamin/Cummings Publ. Co., Inc., 1984. xx, 428 p.: ill.; 23 cm. (Benjamin/Cummings Series in Computing and Information Sciences) Includes glossary and index.  1.--UNIX (Computer system) 2.--XENIX (Computer system) 3.--Computer programming- UNIX I.--Title	
036.9	Bourne, S. R.	3
B667	UNIX system/ S. R. Bourne.-- Reading, MA: Addison-Wesley Publishing Co., 1983. xiii, 351 p.: ill.; 23 cm. (International Computer Science Series) Contains bibliography and index.  1.--Computer systems- UNIX 2.--Computer program language- C I.--Title	
759.3	Dent, Borden D.	4
D434	Principles of thematic map design/ Borden D. Dent. Reading, MA: Addison-Wesley Publishing Co., 1985. xv, 398 p.: ill.: maps; 24 cm. Contains index and bibliographic references.  1.--Cartography- Textbooks 2.--Mapmaking I.--Title	

- 759.3 **Principles of thematic map design** (Title card)  
D434 Dent, Borden D.  
Principles of thematic map design / Borden D.  
Dent. -- Reading, MA : Addison-Wesley Publishing  
Co., 1985.  
xv, 398 p. : ill., maps ; 24 cm.  
Contains index and bibliographic references.
- 1.-Cartography- Textbooks 2.-Mapmaking I.-Title
- 759.3 **Cartography- Textbooks** (Added/subject  
D434 Dent, Borden D. entries)\*  
Principles of thematic map design / Borden D.  
Dent. -- Reading, MA : Addison-Wesley Publishing  
Co., 1985.  
xv, 398 p. : ill., maps ; 24 cm.  
Contains index and bibliographic references.
- 1.-Cartography- Textbooks 2.-Mapmaking I.-Title
- 759.3 **Mapmaking** (Added/subject  
D434 Dent, Borden D. entries)\*  
Principles of thematic map design / Borden D.  
Dent. -- Reading, MA : Addison-Wesley Publishing  
Co., 1985.  
xv, 398 p. : ill., maps ; 24 cm.  
Contains index and bibliographic references.
- 1.-Cartography- Textbooks 2.-Mapmaking I.-Title

### FIND.CMD Screen Displays

FIND.CMD is used to search for a particular subject, title, author, etc. This command file is convenient for people who are not familiar with regular dBase II search commands. The command DO FIND will display on the CRT some brief instructions and ask you what are you looking for? You enter the information requested and it will search the file for one or more entries per your request.

### Example of Screen Displays

. DO FIND

```
[ FIND.CMD ]
[ Searches dBASE II bibliographic file for text string and displays ]
[ citations on screen ]
```

\*Added and subject entries do not necessarily conform to USGS Authority File.

```
[ Do you need instructions? (Y or N)? :Y ]
[ ]
[ ]
```

```
[ 1 - A search "string" can be any alphanumeric character, word, ]
[ contiguous set of words, or parts of words (prefixes, stems, ]
[ suffixes). ]
[ ]
[ 2 - Responses to questions may be typed in upper or lower case. The ]
[ program capitalizes all text before performing searches or other ]
[ operations. ]
[ ]
[ 3 - Follow all responses with a carriage return (CR). ]
[ ]
[ 4 - To quit the program at any time, strike the escape (ESC) key. ]
[ ]
[ 5 - When the computer displays "WAITING" strike any key to continue. ]
[ ]
[ WAITING ]
```

```
[ Enter letter designator of disk containing dBASE II bibliographic files ]
[ - usually "B" for floppy disks, ]
[ - or "D" for hard disk ]
[ - do not use colon (:) ]
[ ]
[ Disk to be used :D ]
```

```
[ Files available on this disk include: ]
[ ]
[ DATABASE FILES # RCDS LAST UPDATE ]
[ NEWGEOG1 DBF 00565 05/20/85 ]
[ NEWGEOG DBF 00566 05/20/85 ]
[ GEOG DBF 00067 05/15/85 ]
[ NEWGEOG2 DBF 00565 05/20/85 ]
[ GEOG3 DBF 00007 00/00/00 ]
[ ]
[ ]
[ Enter name of file to be searched :NEWGEOG2 ]
```

## CARDFORM.CMD Screen Displays and Printout

The CARDFORM.CMD command file produces 3- by 5-inch catalog cards (using continuous-feed catalog card stock). This command file is fairly complex because it produces up to 16 cards from one entry and shadowprints (darkens) the main entry, title, or added entry headings for easy visibility in the catalog. The print program provides for a complete catalog set of cards or only a main entry card to be used for a shelf list card file. There are separate formats for printing the title card, main entry card, and up to six subject or added entry cards. Lengthy citations may require more than one card which are printed as card 1 and card 2.

### Example of Screen Displays

. DO CARDFORM

```
[ CARDFORM.CMD ]
[ Prints 3- by 5-inch library catalog cards on a NEC Spinwriter ]
[ ----- ]
[ Set up Spinwriter as follows: ]
[   Use 12-pitch type element ]
[   Set thumbwheels to page length 24 ]
[   Set small "LF" switch to UP position - 8 lines per inch ]
[   Set small "SP" switch to UP position - 12 characters per inch ]
[ ]
[ Place card stock in forms tractor ]
[   Align left perforation with red dot on Spinwriter print shield ]
[   Align top of card with red dash on Spinwriter print shield ]
[ ]
[ TURN PRINTER ON ]
[ Strike any key to continue ]
[ WAITING ]
```

```
[ Do you want to: ]
[ ]
[ A - Print a complete set of cards (main entry, title, added entries) ]
[   for each record in the file, or ]
[ ]
[ B - Print shelf list cards (main entry) only. ]
[ ]
[ Enter "A" or "B" :A ]
```

```
[ Enter letter designator of disk containing dBASE II files ]
[   - usually "B" for floppy disks, ]
[   - or "D" for hard disk ]
[   - do not use colon (:) ]
[ ]
[ Disk to be used :D ]
```

```
[ Do you need to see which files are available? (Y or N)? :Y ]
[ ]
[ ]
```

```
[ DATABASE FILES   # RCDS   LAST UPDATE ]
[ NEWGEOG1 DBF     00565    05/20/85 ]
[ NEWGEOG  DBF     00566    05/20/85 ]
[ GEOG       DBF     00067    05/15/85 ]
[ NEWGEOG2 DBF     00565    05/20/85 ]
[ GEOG3      DBF     00007    00/00/00 ]
[ ]
[ Enter name of data file to be printed ]
[ File can be sequential or indexed, example: ]
[   FILENAME                (for sequential file) ]
[   FILENAME INDEX INDEXNAME (for indexed file) ]
[ ]
[ File to be used:GEOG ]
```

```
[ Enter starting/ending record numbers of citations to be printed ]
[ Start with record number (1 for beginning of file) :15 ]
[ End with record number (9999 for end of file) :25 ]
```

### Example of Printout

759.3      **Dent, Borden D.** (Main entry)  
D434          Principles of thematic map design / Borden D.  
Dent. -- Reading, MA : Addison-Wesley Publishing  
Co., 1985.  
            xv, 398 p. : ill., maps ; 24 cm.  
Contains index and bibliographic references.

1.-Cartography- Textbooks   2.-Mapmaking   I.-Title

759.3      **Dent, Borden D.** (Shelf list)  
D434          Principles of thematic map design / Borden D.  
Dent. -- Reading, MA : Addison-Wesley Publishing  
Co., 1985.  
            xv, 398 p. : ill., maps ; 24 cm.  
Contains index and bibliographic references.

1.-Cartography- Textbooks   2.-Mapmaking   I.-Title

```

[ Fields available for search include: ]
[ A - CLASS           F - AUTH:EDIT       J - COLLATE ]
[ B - CUTTER          G - PLACE           K - SERIES ]
[ C - WORKMARK         H - PUBLISHER       L - NOTES ]
[ D - MAIN:ENTRY       I - DATE            M - SUBJECTS ]
[ E - TITLE ]
[ ]
[ Enter letter to left of field to be searched :M ]
[ ]
[ Enter search string :GEOGRAPHIC INFO ]

```

```

[ Field to be searched is - SUBJECTS ]
[ Search string is - GEOGRAPHIC INFO ]
[ ]
[ Is this correct (Y OR N)? :Y ]

```

```

[ Record Number   59       036.9           B737 ]
[ Braud, DeWitt ]
[ ]
[ FLOW: a computer system for the analysis and graphic description of ]
[ spatial networks (version 4) ]
[ ]
[ by DeWitt Braud, Robert I. Wittick, Daniel L. Stenger ]
[ ]
[ [East Lansing, Mich.] ]
[ ]
[ Michigan State University. Computer Institute for Social Science ]
[ Research. ]
[ ]
[ 1975 ]
[ 22 p. ; 28 cm. ]
[ (Computer Inst. for Social Science Research ; Technical ]
[ Report 74-51) ]
[ ]
[ [This system may be viewed as a complement to the GEOSYS system ]
[ described in Tech. Report 74-53.] ]
[ ]
[ 1.-Computer graphics- Software ]
[ 2.-Computer networks ]
[ 3.-Geographic information systems- FLOW ]
[ I.-Title ]
[ II.-Michigan State Univ. Computer Inst. for Social ]

```

```

[ Record Number      68          036.9          M328c ]
[ Marble, Duane F. ]
[ ]
[ Computer software for spatial data handling : current status and ]
[ future developmental needs ]
[ ]
[ by Duane F. Marble and Donna J. Peuquet ]
[ ]
[ Amherst, NY ]
[ ]
[ Geographic Information Systems Lab., State Univ. of New York ]
[ at Buffalo ]
[ ]
[ [1977] ]
[ 23 p. : ill. ; 28 cm. ]
[ (Geographic Information Systems Laboratory : R-77/8) ]
[ Includes bibliography p. 22-23. ]
[ ]
[ 1.-Computer programming ]
[ 2.-Geographic information systems- Automated ]
[ I.-Title ]
[ II.-Peuquet, Donna J. ]
[ III.-Geographic Information Systems Lab. R-77/8 ]

```

### COPYFIND.CMD Screen Displays

A related command file which we created is COPYFIND.CMD. This program will search the bibliographic file for a particular subject, title, etc. and copy all of the citations found into a new file as designated by the user. The new file can be sorted, indexed, edited, and printed for use as a bibliography.

#### Example of Screen Displays

```
. DO COPYFIND
```

```

[ COPYFIND.CMD ]
[ Searches dBASE II bibliographic file for text string and copies cita- ]
[ tions into a new retrieval file. ]

```

```

[ Do you need instructions? (Y or N)? :Y ]
[ ]
[ ]

```

```

[ 1 - Fields searched include: main:entry, title, auth:edit and ]
[ subjects, (i.e. added entries). ]
[ ]
[ 2 - A search "string" can be any alphanumeric character, word, ]
[ contiguous set of words, or parts of words (prefixes, stems, ]
[ suffixes). ]
[ ]
[ 3 - Responses to questions may be typed in upper or lower case. ]
[ The program capitalizes all text before searches or other ]
[ operations. ]
[ ]
[ 4 - Follow all responses with a carriage return (CR). ]
[ ]
[ 5 - To quit the program at any time, strike the escape (ESC) key. ]
[ ]
[ 6 - When the computer displays "WAITING" at the bottom of the screen, ]
[ strike any key to continue. ]
[ ]
[ WAITING ]

```

```

[ Enter letter designator of disk ]
[ containing dBASE II bibliographic files, ]
[ - usually "B" for floppy disks, ]
[ - or "D" for hard disk. ]
[ Do not use colon (:) ]
[ ]
[ Disk to be used :D ]

```

```

[ Files available on this disk include: ]
[ ]
[ DATABASE FILES    # RCDS    LAST UPDATE ]
[ NEWGEOG DBF       00565     07/22/85 ]
[ GO DBF            00011     07/26/85 ]
[ NEWGEOG2 DBF      00565     07/26/85 ]
[ GEOG3 DBF         00007     00/00/00 ]
[ GEOG DBF          00086     07/26/85 ]
[ ]
[ Enter name of file to be searched :geog3 ]

```



```
[ Enter new file name for copying records to. ]
[ ]
[ -----CAUTION----- ]
[ DO NOT USE ANY EXISTING dBASE II FILE NAME. The COPY command will ]
[ overwrite an existing, unopened file with the same name. Also, there ]
[ must be sufficient space left on the disk for the new file, otherwise ]
[ the program will abort due to insufficient space. ]
[ -----CAUTION----- ]
[ ]
[ Enter new file name for storing retrieved records :cstore ]
```

```
[ Enter search string :compute ]
[ ]
[ File to be searched is - D:GEOG3 ]
[ New file to copy to is - CSTORE.DBF ]
[ Search string is - COMPUTE ]
[ ]
[ Is this correct (Y or N)? :Y ]
```

```
[ SEARCH IN PROGRESS - PLEASE WAIT ]
[ END OF FILE ENCOUNTERED ]
[ ]
[ DATABASE FILES    # RCDS    LAST UPDATE ]
[ NEWGEOG DBF      00565      07/22/85 ]
[ CSTORE DBF       00007      07/28/85 ]
[ GO DBF          00011      07/26/85 ]
[ NEWGEOG2 DBF     00565      07/26/85 ]
[ GEOG3 DBF        00007      00/00/00 ]
[ GEOG DBF         00086      07/26/85 ]
[ ]
[ RETURN TO DBASE II ]
```

### XFIND.CMD Screen Displays

The XFIND.CMD command file is more sophisticated than COPYFIND.CMD and allows the use of logical operators and up to four search terms or fields.

#### Example of Screen Displays

```
[ ]
[ XFIND.CMD ]
[ SEARCHES BIBLIOGRAPHIC FILE FOR 1 TO 4 TERMS/CONDITIONS ]
[ ]
[ ENTER FILE NAME :newgeog ]
```

```

[ File :NEWGEOG ]
[ ]
[ Enter:  Item   Field      Term ]
[       A      :AUTH:EDIT:  :ANDERSON ]
[       B      :AUTH:EDIT:  :HARDY ]
[       C      :DATE       :  :1972 ]
[       D      :          :  : ]
[ ]
[ Fields: Class, Cutter, Workmark, Main:entry, Title, Auth:edit, Place, ]
[       Publisher Date, Collate, Series, Notes, Subjects (1 TO 6) ]
[ ]
[ Enter logic (Use parentheses, as required) ]
[ ]
[ :(A .OR. B) .AND. C ]
[ ]
[ Correct? : : ('Y' If correction desired) ]
[ ]
[ Logical Operators: .OR. .AND. .NOT. ]

```

```

[ RECORD: 00521      CLASS: 585.6      CUTTER: An23      WORKMARK: 671 ]
[ MAIN ENTRY: Anderson, James Richard ]
[ ]
[ TITLE: A land-use classification system for use with remote sensor data ]
[ ]
[ AUTHOR,EDITOR: by James R. Anderson, Ernest E. Hardy, and John T. Roach ]
[ ]
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```

### BRLIST.CMD Screen Displays and Printout

The BRLIST.CMD command file is used to print a sequential or indexed list of citations which includes the catalog call numbers. It could be used to print out the listings obtained by using COPYFIND.CMD (see above) if reference collection call numbers for each entry are also needed.

## Example of Screen Displays

. DO BRLIST

```
[ BRLIST.CMD ]
[ ----- ]
[ Prints out call numbers and citations from a dBASE II ]
[ bibliographic file on a NEC Spinwriter. Programs BRLIST2.CMD, ]
[ BRLIST3.CMD, and CARD1.CMD are called and must be available. ]
[ Fields printed include: class, cutter, workmark, main:entry, ]
[ title, auth:edit, publisher, date, and collate. ]
[ ]
[ Set up NEC Spinwriter as follows: ]
[   Form length = 66 ]
[   Line feed = 6 (switch down) ]
[   Character spacing = 12 (switch up) ]
[   Use 12-pitch typing element ]
[   Turn NEC Spinwriter on ]
```

```
[ Do you want to see what dBASE II files are available? (Y or N)? :Y ]
[ ]
[ ]
```

```
[ Enter letter designator of disk containing dBASE II bibliographic files ]
[   - usually "B" for floppy disks, ]
[   - or "D" for hard disk ]
[   - do not use colon (:) ]
[ ]
[ Disk to be used :D ]
```

```
[ DATABASE FILES  # RCDS  LAST UPDATE ]
[ NEWGEOG1 DBF    00565   05/20/85 ]
[ NEWGEOG  DBF    00566   05/20/85 ]
[ GEOG      DBF    00067   05/15/85 ]
[ NEWGEOG2 DBF    00565   05/20/85 ]
[ GEOG3     DBF    00007   00/00/00 ]
[ ]
[ Enter name of file to be used ]
[   File may be sequential or indexed, example: ]
[   FILENAME          (for sequential file) ]
[   FILENAME INDEX INDEXNAME (for indexed file) ]
[ ]
[ File to be used :NEWGEOG2 ]
```

```
[ ENTER FIRST LINE OF HEADING ]
[ :National Mapping Division, Office of Research ]
[ ]
[ ENTER SECOND LINE OF HEADING ]
[ :Sample Brieflist Printout ]
```

### Example of Printout

```
759.5    Auto-carto 7: proceedings: digital representations of spatial
Au82p    knowledge. Seventh international symposium on computer-assisted
1985     cartography: technical papers: (Auto-Carto 7): Digital .../
         Auto-carto 7 Technical Program Committee.--Falls Church, VA:
         American Society of Photogram. & American Congress on Surveying
         & Mapping, 1985. xvii, 599 p.: ill.; 23 cm.

036.9    Bourne, S. R. UNIX system/ S. R. Bourne.-- Reading, MA:
B667     Addison-Wesley Publishing Co., 1983. xiii, 351 p.: ill.; 23 cm.
         1984. xx, 428 p.: ill.; 23 cm.

759      Campbell, James B. Mapping the land: aerial imagery for land
C152m    use information./ James B. Campbell.-- Washington, D.C.:
         Association of American Geographers, 1983. viii, 96 p.: ill.:
         maps; 22 cm.

039.3    Database management systems: practical aspects of their use/
D262f    edited by R. A. Frost.-- New York: McGraw-Hill, 1984. x, 265
         p.: ill.; 24 cm.

759.3    Dent, Borden D. Principles of thematic map design/ Borden D.
D434     Dent.-- Reading, MA: Addison-Wesley Publishing Co., 1985. xv,
         398 p.: ill.: maps; 24 cm.

540      Index to a set of one hundred topographic maps: illustrating
(200)    specified physiographic features/ assembled by William B. Upton,
Up8in    Jr., 1955.-- Washington, D.C.: U.S. Geological Survey, 1970.
         1 folded sheet.
```

### GSLIST.CMD Screen Displays and Printout

GSLIST.CMD is used to print a bibliographic listing in standard U.S. Geological Survey format. It may be used in conjunction with COPYFIND.CMD to prepare specific subject bibliographies.

## Example of Screen Displays

. DO GSLIST

```
[          GSLIST.CMD          ]
[-----]
[ Prints out bibliographic citations in Geological Survey format. ]
[ Does not print out series, notes, or added entries. ]
[ ]
[ Uses a NEC Spinwriter. Set line length to 66. Set line feed (LF) to 6 ]
[ (switch down), spacing (SP) to 12 (switch up). ]
[ Use a 12-pitch typing element. ]
[ ]
[ Note: Programs CARD1.CMD and GSCOUNT.CMD are called and must be ]
[ available. ]
```

```
[ Do you want to see what dBASE II files are available? (Y or N)? :Y ]
[ ]
[ ]
```

```
[ Enter letter designator of disk containing dBASE II bibliographic files ]
[ - usually "B" for floppy disks, ]
[ - or "D" for hard disk ]
[ - Do not use colon (:) ]
[ ]
[ Disk to be used :D ]
```

```
[ DATABASE FILES  # RCDS  LAST UPDATE ]
[ NEWGEOG1 DBF    00565   05/20/85 ]
[ NEWGEOG DBF     00566   05/20/85 ]
[ GEOG DBF        00067   05/15/85 ]
[ NEWGEOG2 DBF    00565   05/20/85 ]
[ GEOG3 DBF       00007   00/00/00 ]
[ ]
[ Enter name of file to be used ]
[ File may be sequential or indexed, example: ]
[ FILENAME (for sequential file) ]
[ FILENAME INDEX INDEXNAME (for indexed file) ]
[ ]
[ File to be used :NEWGEOG1 ]
```

[ ENTER FIRST LINE OF HEADING	]
[ :National Mapping Division, Office of Research	]
[ ENTER SECOND LINE OF HEADING	]
[ :Sample GSlist Printout	]

### Example of Printout

1. Bourne, S. R., 1983, UNIX system: Reading, MA, Addison-Wesley Publishing Co., xiii, 351 p.: ill.; 23 cm.
2. Calkins, Hugh W., 1980, Long range information need assessment (INA) for the resource information display system: Amherst, NY, Geographic Information Systems Lab., State Univ. of New York at Buffalo, 82 p.: ill.; 28 cm.
3. Campbell, James B., 1983, Mapping the land: aerial imagery for land use information.: Washington, D.C., Association of American Geographers, viii, 96 p.: ill.: maps; 22 cm.
4. Database management systems: practical aspects of their use, 1984,: New York, McGraw-Hill, x, 265 p.: ill.; 24 cm.
5. Dent, Borden D., 1985, Principles of thematic map design: Reading, MA Addison-Wesley Publishing Co., xv, 398 p.: ill.: maps; 24 cm.
6. Index to a set of one hundred topographic maps: illustrating specified physiographic features, 1970,: Washington, D.C., U.S. Geological Survey, 1 folded sheet.
7. Peucker, Thomas K., 1972, Computer cartography: a working bibliography: [Toronto, Canada], University of Toronto, Dept. of Geography, 142 p.; 28 cm.



## APPENDIX--COMMAND FILES

```

*=====*
* Command File: PROOF.CMD                                     *
* Function: Used to print a proof listing of citations..      *
* Calls:: Card1.cmd, Proof2.cmd, Proof3.cmd                  *
* Version: 1.0                                                *
*=====*

```

```

RELEASE ALL
ERASE
SET TALK OFF

```

\* Initial screen, setup instructions.

```

? '-----'
? '                PROOF.CMD'
? ' Prints out main entry card with record number. Used for proofing new'
? ' entries.'
? '-----'
?
? 'Set up NEC Spinwriter as follows:'
? '  Form length = 66'
? '  Line feed = 6 (switch down)'
? '  Character spacing = 12 (switch up)'
? '  Use 12 pitch typing element'
? '  Turn NEC Spinwriter on'
?
? 'Strike any key when ready.....'
? '-----'
?

```

```

WAIT
STORE ' ' TO DISK
ERASE
ACCEPT 'Do you want to see what dBASE II files are available? (Y or N)? ';
TO INSTR
If !(INSTR) = 'Y'
ERASE
? 'Enter letter designator of disk'
? '  containing dBASE II bibliographic files,'
? '  - usually "B" for floppy disks,'
? '  - or "D" for hard disk'
? '  - do not use colon (:)'
?

ACCEPT 'Disk to be used ' TO DISK
STORE DISK+': ' TO DISK
ERASE
DISP FILES ON &DISK
ENDIF

```



```

? 'Enter name of file to be used'
? '  File may be sequential or indexed, example:'
? '  FILENAME                (for sequential file)'
? '  FILENAME INDEX INDEXNAME (for indexed file)'
?

```

```

ACCEPT 'FILE to be used ' TO FILE
USE &DISK&FILE

```

```

STORE 1 TO PAGE
STORE 1 TO LINE
DO WHILE .NOT. EOF
  STORE 65 TO LINELEN
  STORE '11' TO LNO

```

\* Begin formatting of main memory.

```

STORE TRIM(MAIN:ENTRY) TO PRINT:FLD
IF $(PRINT:FLD,LEN(PRINT:FLD),1) <> '.'
  STORE PRINT:FLD+'.' TO PRINT:FLD
ENDIF
DO CARD1
STORE LNO TO SST
STORE ' '+TRIM(TITLE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LNO
STORE TRIM(&U)+'/' +TRIM(AUTH:EDIT)+' -- '+TRIM(PLACE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LNO
STORE TRIM(&U)+' : '+TRIM(PUBLISHER)+' , '+TRIM(DATE)+'.' TO PRINT:FLD
DO CARD1
STORE LNO TO SS2
STORE ' '+TRIM(COLLATE) TO PRINT:FLD
DO CARD1
STORE TRIM(SERIES)+' '+TRIM(NOTES) TO PRINT:FLD
DO CARD1

```

\* Store blank line

```

STORE 'LINE'+LNO TO U
STORE ' ' TO &U
STORE STR(&LNO+1,2) TO LNO
STORE LNO TO SS3

```

\* Format subject headings.

```

IF S3 <> ' '
  STORE TRIM(S1)+' '+TRIM(S2)+' '+TRIM(S3) TO PRINT:FLD
ELSE
  IF S2 <> ' '
    STORE TRIM(S1)+' '+TRIM(S2) TO PRINT:FLD
  ELSE
    IF S1 <> ' '
      STORE TRIM(S1) TO PRINT:FLD
    ENDIF
  ENDIF
ENDIF
DO CARD1
IF S6 <> ' '
  STORE TRIM(&U)+' '+TRIM(S4)+' '+TRIM(S5)+' '+TRIM(S6);
  TO PRINT:FLD
ELSE
  IF S5 <> ' '
    STORE TRIM(&U)+' '+TRIM(S4)+' '+TRIM(S5) TO PRINT:FLD
  ELSE
    IF S4 <> ' '
      STORE TRIM(&U)+' '+TRIM(S4) TO PRINT:FLD
    ENDIF
  ENDIF
ENDIF
IF S4 <> ' '
  STORE STR(&LNO-1,2) TO LNO
  DO CARD1
ENDIF
STORE STR(&LNO-1,2) TO LASTLINE

* Print main entry

DO PROOF2
SKIP
ENDDO

```

```

*=====*
* Subsidiary Command File: PROOF2.CMD *
* Function: Prints citation. *
* Called by: Proof.cmd *
* Calls: Proof3.cmd *
* Version: 1.0 *
*=====*

```

```

ERASE
SET FORMAT TO PRINT
STORE '11' TO LNO
STORE LINE + 2 TO LINE
IF LINE + VAL(LASTLINE) - 10 >= 60
  STORE 60 TO LINE
ENDIF

```

```

* Prints first three lines of citation.

```

```

DO PROOF3
@ line,2 SAY CLASS
@ LINE,10 SAY &U
@ line,75 say #
DO PROOF3
@ line,2 SAY CUTTER
@ LINE,10 SAY &U
DO PROOF3
@ line,2 SAY WORKMARK
@ LINE,10 SAY &U

```

\* Prints remainder of citation.

```

DO WHILE VAL(LNO) <= VAL(LASTLINE)
  DO PROOF3
  @ LINE,10 SAY &U
ENDDO
RETURN

```

```

*=====
* Subsidiary Command File: PROOF3.CMD
* Function: Line and page counter.
* Called by: Proof3.cmd
* Version: 1.0
*=====

```

```

store 'line'+lno to u
store line+1 to line
IF LINE >= 60
  @ 63,35 SAY PAGE
  STORE PAGE + 1 TO PAGE
  EJECT
  STORE 3 TO LINE
ENDIF
Store str(&lno+1,2) to lno
RETURN

```

```

*=====
* Command File: CARDFORM.CMD
* Function: Reads bibliographic records and prints out catalog cards in
*           AACR-2 format.
* Calls: Card1.cmd through Card9.cmd
* Version: 1.0
*=====

```

SET TALK OFF

ERASE

RELEASE ALL

```
? '-----',
? '
CARDFORM.CMD'
? 'Prints 3 X 5 inch library catalog cards on a NEC Spinwriter'
? '-----',
?
? 'Set Spinwriter up as follows:'
? ' Use 12 pitch type element'
? ' Set thumbwheels to page length 24'
? ' Set small "LF" switch to UP position - 8 lines per inch'
? ' Set small "SP" switch to UP position - 12 characters per inch'
?
? 'Place card stock in forms tractor'
? ' Align left perforation with red dot on Spinwriter print shield'
? ' Align left perforation with red dash on Spinwriter print shield'
?
? 'TURN PRINTER ON'
?
? 'Strike any key to continue'
wait
store 0 to choice
do while choice = 0
erase
? 'Do you want to:'
?
? 'A - Print a complete set of cards (main entry, title, added'
? ' entries and shelf list) for each record in the file, or'
?
? 'B - Print only a main entry card.'
?
accept 'Enter "A" or "B" ' to cardset
if !(cardset) = 'A'
store 'COMPLETE' to cardset
store 1 to choice
endif
if !(cardset) = 'B'
store 'MAIN' to cardset
store 1 to choice
endif
endif
enddo choice
ERASE
?
? 'Enter letter designator of disk'
? ' containing dBASE II files'
? ' - usually "B" for floppy disks,'
? ' - or "D" for hard disk'
? ' - do not use colon (:)'
?
```

```

ACCEPT 'Disk to be used ' TO DISK
STORE DISK+': ' TO DISK
ERASE
ACCEPT 'Do you need to see which files are available? (Y or N)?' TO AVAIL
IF !(AVAIL) = 'Y'
ERASE
DISP FILES ON &DISK
ENDIF
?
ACCEPT 'Enter name of file to be used ' TO MACRO
USE &DISK&MACRO

ERASE
?
? 'Enter starting/ending record numbers of citations to be printed'
?
ACCEPT 'Start with record number (1 for beginning of file) ' TO RSTART
?
ACCEPT 'End with record number (9999 for end of file) ' TO REND

GOTO VAL(RSTART)
DO WHILE # <= VAL(REND)
IF EOF
    ? "End of file encountered"
    CANCEL
ENDIF

ERASE
SET FORMAT TO SCREEN

@ 2,2 SAY 'RECORD NUMBER BEING PROCESSED: '
@ 2,33 SAY #
@ 4,2 SAY 'MAIN:ENTRY: '+MAIN:ENTRY
@ 7,2 SAY 'TITLE: '+TITLE

STORE 49 TO LINELEN
STORE '11' TO LNO

* Format title card line(s).

@ 10,10 SAY 'FORMATTING TITLE CARD LINES'
store trim(title) to print:fld
do CARD1

* Store blank line.

store 'line'+lno to u
store ' ' to &u
store str(&lno+1,2) to lno
store lno to ssl

```

\* Format main entry.

```
@ 11,10 SAY 'FORMATTING MAIN ENTRY'
STORE TRIM(MAIN:ENTRY) TO PRINT:FLD
if $(print:fld,len(print:fld),1) <> '.'
  store print:fld+'.' to print:fld
endif
DO CARD1
STORE LNO TO SST
STORE ' '+TRIM(TITLE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LNO
STORE TRIM(&U)+' / '+TRIM(AUTH:EDIT)+' -- '+TRIM(PLACE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LNO
STORE TRIM(&U)+' : '+TRIM(PUBLISHER)+' , '+TRIM(DATE)+'.' TO PRINT:FLD
DO CARD1
STORE LNO TO SS2
STORE ' '+TRIM(COLLATE) TO PRINT:FLD
DO CARD1
STORE TRIM(SERIES)+' '+TRIM(NOTES) TO PRINT:FLD
DO CARD1
```

\* Store blank line.

```
STORE 'LINE'+LNO TO U
STORE ' ' TO &U
STORE STR(&LNO+1,2) TO LNO
STORE LNO TO SS3
```

\* Format added entries.

```
@ 12,10 SAY 'FORMATTING ADDED ENTRIES'
IF S3 <> ' '
  STORE TRIM(S1)+' '+TRIM(S2)+' '+TRIM(S3) TO PRINT:FLD
ELSE
  IF S2 <> ' '
    STORE TRIM(S1)+' '+TRIM(S2) TO PRINT:FLD
  ELSE
    IF S1 <> ' '
      STORE TRIM(S1) TO PRINT:FLD
    ENDIF
  ENDIF
ENDIF
DO CARD1
IF S6 <> ' '
  STORE TRIM(&U)+' '+TRIM(S4)+' '+TRIM(S5)+' '+TRIM(S6) TO PRINT:FLD
ELSE
  IF S5 <> ' '
    STORE TRIM(&U)+' '+TRIM(S4)+' '+TRIM(S5) TO PRINT:FLD
  ELSE
    IF S4 <> ' '
      STORE TRIM(&U)+' '+TRIM(S4) TO PRINT:FLD
    ENDIF
  ENDIF
ENDIF
```

```

IF S4 <> ' '
  STORE STR(&LNO-1,2) TO LNO
  DO CARD1
ENDIF
STORE STR(&LNO-1,2) TO SS4

* Print main entry card.

SET FORMAT TO SCREEN
@ 14,10 SAY 'PRINTING MAIN ENTRY CARD(S)'
STORE 'MAIN' TO CARDTYPE
STORE SS1 TO LNO
STORE 1 TO LINE
IF VAL(SS4) - VAL(SS1) > 19
  STORE STR(&SS3-2,2) TO LASTLINE
ELSE
  STORE SS4 TO LASTLINE
ENDIF
DO CARD2
  IF VAL(SS4) - VAL(SS1) > 19
    @ 22,45 SAY 'Card 1'
    EJECT
    DO CARD5
  ENDIF
  if cardset = 'MAIN'
    skip
    loop
  else
    store 'SHELF' to cardset
  endif
endif

* Print shelf list card(s)

SET FORMAT TO SCREEN
@ 15,10 SAY 'PRINTING SHELF LIST CARD(S)'
STORE 'MAIN' TO CARDTYPE
STORE SS1 TO LNO
STORE 1 TO LINE
IF VAL(SS4) - VAL(SS1) > 19
  STORE STR(&SS3-2,2) TO LASTLINE
ELSE
  STORE SS4 TO LASTLINE
ENDIF
DO CARD2
  IF VAL(SS4) - VAL(SS1) > 19
    @ 22,45 SAY 'Card 1'
    EJECT
    DO CARD5
  ENDIF
STORE ' ' TO CARDSET

* Print title card.

```

```

SET FORMAT TO SCREEN
@ 16,10 SAY 'PRINTING TITLE CARD(S)'
STORE 'TITLE' TO CARDTYPE
IF TITLE <> ' '
  STORE '11' TO LNO
  STORE 1 TO LINE
  IF VAL(SS4) > 29
    STORE STR(&SS3-2,2) TO LASTLINE
  ELSE
    STORE SS4 TO LASTLINE
  ENDIF
  DO CARD2
  IF VAL(SS4) > 29
    @ 22,45 SAY 'Card 1'
    EJECT
    DO CARD8
  ENDIF
ENDIF
ENDIF

```

\* Print added entry cards.

```

SET FORMAT TO SCREEN
@ 17,10 SAY 'PRINTING ADDED ENTRY CARD(S)'
STORE 'ADDED' TO CARDTYPE
DO CARD3
SKIP
ENDDO
ERASE
SET FORMAT TO SCREEN
@ 5,10 SAY 'LAST RECORD ENCOUNTERED - PROCESSING FINISHED'

```

```

*=====*
* Subsidiary Command File: CARD1.CMD *
* Function: A typesetting program which formats textual data in computer *
*           memory. *
* Called by: Cardform.cmd *
* Version: 1.0 *
*=====*

```

```

STORE LEN(PRINT:FLD) TO V
STORE 1 TO BEGIN
IF V < LINELEN
  STORE V TO LAST
ELSE
  STORE LINELEN TO LAST

```



```

ENDIF
STORE 'T' TO MORE:LINES
STORE 'T' TO GO
DO WHILE MORE:LINES = 'T'
    DO WHILE GO = 'T' .AND. LAST <> V
        STORE $(PRINT:FLD, LAST, 1) TO CHAR1
        IF CHAR1 = ' '
            STORE 'F' TO GO
        ELSE
            STORE LAST-1 TO LAST
        ENDIF
    ENDDO
    STORE 'LINE' + LNO TO U
    STORE $(PRINT:FLD, BEGIN, LAST-BEGIN+1) TO &U
    STORE STR(&LNO+1, 2) TO LNO
    STORE LAST+1 TO BEGIN
    IF BEGIN + LINELEN > V
        STORE V TO LAST
        STORE 'F' TO GO
    ELSE
        STORE LAST+LINELEN TO LAST
        STORE 'T' TO GO
    ENDIF
    IF BEGIN > V
        STORE 'F' TO MORE:LINES
    ENDIF
ENDDO
RETURN

```

```

*=====*
* Subsidiary Command File: CARD2.CMD *
* Function: Prints main entry and title cards. *
* Called by: Cardform.cmd *
* Calls: Card4.cmd, Card9.cmd *
* Version: 1.0 *
*=====*

```

```

SET EJECT OFF
SET FORMAT TO PRINT

```

\* Do first three lines of card with class, cutter, workmark.

```

@ 2,2 SAY CLASS
DO CARD4
DO CARD9
@ 3,2 SAY CUTTER
DO CARD4
DO CARD9
@ 4,2 SAY WORKMARK
DO CARD4
DO CARD9

```

\* Do body of card.

```

DO WHILE VAL(LNO) <= VAL(LASTLINE)
  DO CARD4
    @ LINE,10 SAY &U
  ENDDO
  IF CARDSET = 'SHELF'
    @ 22,10 SAY 'SHELF LIST'
  ENDIF
RETURN

```

```

*=====*
* Subsidiary Command File: CARD3.CMD *
* Function: Sequencing and control for Card7.cmd *
* Called by Cardform.Cmd *
* Calls: Card6.cmd. Card7.cmd *
* Version 1.0 *
*=====*

```

```

STORE '1' TO CT
DO WHILE VAL(CT) < 7
  STORE 'S' + CT TO W

```

\* Eliminate "title" entry.

```

IF '-TITLE'$!(&W)
  STORE STR(&CT+1,1) TO CT
  LOOP
ENDIF

```

\* Process if not blank.

```

IF &W <> ' '
  STORE &W TO GROUP
  STORE SS1 TO LNO
  STORE 4 TO LINE
  IF VAL(SS4) - VAL(SS1) > 16
    STORE STR(&SS3-2,2) TO LASTLINE
  ELSE
    STORE SS4 TO LASTLINE
  ENDIF

```

```

DO CARD7

```

\* Print second card, if overflow.

```

  IF VAL(SS4) - VAL(SS1) > 16
    @ 22,45 SAY 'Card 1'
    EJECT
    DO CARD6
  ENDIF

```

```

  ELSE
    STORE '7' TO CT
  ENDIF
  STORE STR(&CT+1,1) TO CT
ENDDO
RETURN

```

```

*=====*
* Subsidiary Command File: CARD4.CMD *
* Function: Increments line numbers. *
* Called by: Card2.cmd, Card5.cmd, Card6.cmd, Card7.cmd, Card8.cmd *
* Version : 1.0 *
*=====*

```

```

store 'line'+lno to u
store line+1 to line
Store str(&lno+1,2) to lno
RETURN

```

```

*=====*
* Subsidiary Command File: CARD5.CMD *
* Function: If overflow, prints second card for main entry. *
* Called by Cardform.cmd *
* Calls: Card2.cmd, Card4.cmd *
* Version 1.0 *
*=====*

```

```

STORE SS1 TO LNO
STORE 1 TO LINE
STORE STR(&SS2-1,2) TO LASTLINE
DO CARD2
STORE SS3 TO LNO
STORE SS4 TO LASTLINE
STORE LINE+1 TO LINE
DO WHILE VAL(LNO) <= LASTLINE
    DO CARD4
    @ LINE,10 SAY &U
ENDDO

```

```

* Identify, if shelf list.

```

```

IF CARDSET = 'SHELF'
    @ 22,10 SAY 'SHELF LIST'
ENDIF
@ 22,45 SAY 'Card 2'
RETURN

```

```

*=====*
* Subsidiary Command File: CARD6.CMD *
* Function: If overflfow, prints second subject card *
* Called by: Card3.cmd *
* Calls: Card4.cmd, card7.cmd *
* Version 1.0 *
*=====*

```

```

SET TALK OFF
ERASE
RELEASE ALL
?
? '-----'
? '
? '          FIND.CMD'
? '          Searches bibliographic file for text string'
? '          and displays citations on screen'
? '-----'
?
ACCEPT 'Do you need instructions? (Y or N)? ' TO INSTR
IF !(INSTR) = 'Y'
?
? '1 - A search "string" can be any alphanumeric character, word, contiguous,'
? '    set of words, or parts of words (prefixes, stems, suffixes).'
?
? '2 - Responses to questions may be typed in upper or lower case. The program'
? '    capitalizes all text before performing searches or other operations.'
?
? '3 - Follow all responses with a carriage return (CR).'
?
? '4 - To quit the program at any time, strike the escape (ESC) key.'
?
? '5 - When the computer displays "WAITING" strike any key to continue.'
?
WAIT
ENDIF
ERASE

* Requests disk ID.

? 'Enter letter designator of disk'
? ' containing dBASE II bibliographic files,'
? ' - usually "B" for floppy disks,'
? ' - or "D" for hard disk'
? ' - do not use colon (:)'
?
ACCEPT 'Disk to be used ' TO DISK
STORE DISK+': ' TO DISK
ERASE

* Lists files available on this disk.

?
? 'Files available on this disk include:'
DISP FILES ON &DISK
ACCEPT 'Enter name of file to be searched ' TO FILE
USE &DISK&FILE
ERASE

* Store field codes.

```

```

STORE 'CLASS' TO A
STORE 'CUTTER' TO B
STORE 'WORKMARK' TO C
STORE 'MAIN:ENTRY' TO D
STORE 'TITLE' TO E
STORE 'AUTH:EDIT' TO F
STORE 'PLACE' TO G
STORE 'PUBLISHER' TO H
STORE 'DATE' TO I
STORE 'COLLATE' TO J
STORE 'SERIES' TO K
STORE 'NOTES' TO L
STORE 'SUBJECTS' TO M

```

\* Begin search commands.

```

STORE 'T' TO SEARCH
DO WHILE SEARCH = 'T'
STORE 'Y' TO INPUT
DO WHILE INPUT = 'Y'

```

\* Asks for name of field to be searched.

```

? 'Fields available for search include:'
?
? 'A - CLASS           F - AUTH:EDIT           J - COLLATE'
? 'B - CUTTER          G - PLACE             K - SERIES'
? 'C - WORKMARK        H - PUBLISHER          L - NOTES'
? 'D - MAIN:ENTRY      I - DATE             M - SUBJECTS'
? 'E - TITLE'
?
ACCEPT 'Enter letter to left of field to be searched ' TO FIELD
STORE &FIELD TO FIELD
?

```

\* Asks for search string.

```

ACCEPT 'Enter search string ' TO STRING
STORE !(STRING) TO STRING
ERASE

```

\* Verify search parameters.

```

@ 2,2 SAY 'Field to be searched is - '
@ 2,28 SAY FIELD
@ 3,2 SAY '      Search string is - '
@ 3,28 SAY STRING
?

```

```

STORE SS1 TO LNO
STORE 4 TO LINE
STORE STR(&SS2-1,2) TO LASTLINE
DO CARD7
STORE SS3 TO LNO
STORE SS4 TO LASTLINE
STORE LINE+1 TO LINE
DO WHILE VAL(LNO) <= VAL(LASTLINE)
    DO CARD4
    @ LINE,10 SAY &U
ENDDO
@ 22,45 SAY 'Card 2'
RETURN

```

```

*=====*
* Subsidiary Command File: CARD7.CMD *
* Function: Formats and prints added entry cards. *
* Called by: Card6.cmd *
* Calls: Card4.cmd *
* Version 1.0 *
*=====*

```

```

SET EJECT OFF
SET FORMAT TO PRINT
STORE 'LINE'+LNO TO U
@ 2,2 SAY CLASS
IF $(GROUP,3,1) = '-'
    @ 2,10 SAY chr(27)+'+'+$ (GROUP,4,47)
ELSE
    IF $(GROUP,4,1) = '-'
        @ 2,10 SAY chr(27)+'+'+$ (GROUP,5,46)
    ELSE
        @ 2,10 SAY chr(27)+'+'+$ (GROUP,6,45)
    ENDIF
ENDIF
ENDIF
@ 3,2 SAY CUTTER
@ 4,2 SAY WORKMARK
@ 4,10 SAY &U
STORE STR(&LNO+1,2) TO LNO
DO WHILE VAL(LNO) <= VAL(LASTLINE)
    DO CARD4
    @ LINE,10 SAY &U
ENDDO
RETURN

```

```

*=====*
* Subsidiary Command File: CARD8.CMD *
* Function: If overflow, prints second title card. *
* Called By: Cardform.cmd *
* Calls: Card2.cmd, Card4.cmd *
* Version: 1.0 *
*=====*

```

```

STORE '11' TO LNO
STORE 1 TO LINE
STORE STR(&SS2-1,2) TO LASTLINE
DO CARD2
STORE SS3 TO LNO
STORE SS4 TO LASTLINE
STORE LINE+1 TO LINE
DO WHILE VAL(LNO) <= VAL(LASTLINE)
    DO CARD4
    @ LINE,10 SAY &U
ENDDO
@ 22,45 SAY 'Card 2'
RETURN

```

```

*=====*
* Subsidiary Command File: CARD9.CMD *
* Function: Produces shadow print for main entry and title cards. *
* Called By: Cardform.cmd *
* Version: 1.0 *
*=====*

```

```

DO CASE
CASE CARDTYPE = 'TITLE' .AND. VAL(LNO) < VAL(SS1)
    @ LINE,10 SAY CHR(27)+'+'&U
CASE CARDTYPE = 'MAIN' .AND. VAL(LNO) <= VAL(SST)
    @ LINE,10 SAY CHR(27)+'+'&U
OTHERWISE
    @ LINE,10 SAY &U
ENDCASE
RETURN

```

```

*=====*
* Command File: FIND.CMD *
* Function: Searches bibliographic file for text string, and displays *
* citations on screen. *
* Version: 1.0 *
*=====*

```

```

ACCEPT 'Is this correct (Y OR N)?' TO CHECK
STORE !(CHECK) TO CHECK
IF CHECK <> 'Y'
ERASE
LOOP
ENDIF
ERASE
DO WHILE .NOT. EOF
STORE 'NO' TO HIT
@ 1,1 SAY #
DO CASE
    CASE FIELD = 'SUBJECTS'
        IF '&STRING' $ !(S1) .OR. ;
            '&STRING' $ !(S2) .OR. ;
            '&STRING' $ !(S3)
            STORE 'YES' TO HIT
        ENDIF
        IF HIT = 'NO'
            IF '&STRING' $ !(S4) .OR. ;
                '&STRING' $ !(S5) .OR. ;
                '&STRING' $ !(S6)
                STORE 'YES' TO HIT
            ENDIF
        ENDIF
    OTHERWISE
        IF '&STRING' $ !(&FIELD)
            STORE 'YES' TO HIT
        ENDIF
ENDCASE
IF HIT = 'YES'
WAIT

```

\* Display sequence for hits.

```

ERASE
@ 3,0 SAY 'Record Number '
@ 3,14 SAY #
@ 3,25 SAY CLASS
@ 3,45 SAY CUTTER
@ 3,55 SAY WORKMARK
@ 4,0 SAY MAIN:ENTRY
@ 6,0 SAY TITLE
@ 8,0 SAY AUTH:EDIT
@ 10,0 SAY PLACE
@ 11,0 SAY PUBLISHER
@ 12,0 SAY DATE
@ 13,0 SAY COLLATE
@ 14,0 SAY SERIES
@ 15,0 SAY NOTES
@ 17,0 SAY S1
@ 18,0 SAY S2
@ 19,0 SAY S3
@ 20,0 SAY S4
@ 21,0 SAY S5
@ 22,0 SAY S6

```



```

ENDIF
SKIP
ENDDO EOF
@ 23,0 SAY 'END OF FILE ENCOUNTERED'
ACCEPT 'Another search (Y OR N)?' TO INPUT
IF INPUT = 'Y' .OR. INPUT = 'y'
    ERASE
    GOTO TOP
ELSE
    STORE 'F' TO SEARCH
ENDIF
ENDDO INPUT
ENDDO SEARCH
ERASE
? 'RETURN TO dBASE II'

```

```

*=====*
* Command File: XFIND.CMD *
* Function: Used to search bibliographic file, with provision for up to four *
*          search terms and Boolean logic. *
* Calls: Xone.fmt, Xtwo.fmt *
* Version: 1.0 *
*=====*

```

```

RELEASE ALL
SET TALK OFF
ERASE

```

\* Get name of file.

```

? "PROGRAM XFIND.CMD"
? "SEARCHES BIBLIOGRAPHIC FILE FOR 1 TO 4 TERMS/CONDITIONS"
?
ACCEPT "ENTER FILE NAME  " TO FILE
USE &FILE

```

\* Initialize memory variables.

```

STORE "      " TO FIELD A
STORE "      " TO FIELD B
STORE "      " TO FIELD C
STORE "      " TO FIELD D
STORE "      " TO TERMA
STORE "      " TO TERMB
STORE "      " TO TERMC
STORE "      " TO TERMD
STORE " " TO CORRECT
STORE "      " TO LOGIC
STORE " " TO LNO

```

\* Get fields/terms for search.

```

SET FORMAT TO XONE
READ
DO WHILE CORRECT = "Y" .OR. CORRECT = "y"
    STORE ' ' TO CORRECT
    READ
ENDDO

```

\* Edit memory variables.

```

STORE !(TRIM(TERMA)) TO TERMA
STORE !(TRIM(TERMB)) TO TERMB
STORE !(TRIM(TERMC)) TO TERMC
STORE !(TRIM(TERMD)) TO TERMD
STORE "'&TERMA'" TO TERMA
STORE "'&TERMB'" TO TERMB
STORE "'&TERMC'" TO TERMC
STORE "'&TERMD'" TO TERMD
STORE "IF &LOGIC" TO LOGIC

```

\* Do search, and display hits.

```

SET FORMAT TO XTWO

```

```

DO WHILE .NOT. EOF
@ 23,1 SAY #
STORE TRIM(FIELDA) TO FIELDA
STORE F TO A
IF "SUB" $ !(FIELDA)
    IF &TERMA $ !(S1);
        .OR. &TERMA $ !(S2);
        .OR. &TERMA $ !(S3);
        .OR. &TERMA $ !(S4);
        .OR. &TERMA $ !(S5);
        .OR. &TERMA $ !(S6)
        STORE T TO A
    ENDIF
ELSE
    IF &TERMA $ !(&FIELDA)
        STORE T TO A
    ENDIF
ENDIF

```

```

STORE TRIM(FIELDB) TO FIELDB
STORE F TO B
IF FIELDB <> " "
    IF "SUB" $ !(FIELDB)
        IF &TERMB $ !(S1);
            .OR. &TERMB $ !(S2);
            .OR. &TERMB $ !(S3);
            .OR. &TERMB $ !(S4);
            .OR. &TERMB $ !(S5);
            .OR. &TERMB $ !(S6)
            STORE T TO B
        ENDIF
    ENDIF
ENDIF

```

```

ENDIF
ELSE
  IF &TERMB $ !(&FIELDB)
    STORE T TO B
  ENDIF
ENDIF
ENDIF

STORE TRIM(FIELDC) TO FIELD
STORE F TO C
IF FIELDC <> " "
  IF "SUB" $ !(&FIELDC)
    IF &TERMC $ !(S1);
      .OR. &TERMC $ !(S2);
      .OR. &TERMC $ !(S3);
      .OR. &TERMC $ !(S4);
      .OR. &TERMC $ !(S5);
      .OR. &TERMC $ !(S6)
    STORE T TO C
  ENDIF
ELSE
  IF &TERMC $ !(&FIELDC)
    STORE T TO C
  ENDIF
ENDIF
ENDIF

STORE TRIM(FIELDD) TO FIELD
STORE F TO D
IF FIELDD <> " "
  IF "SUB" $ !(&FIELDD)
    IF &TERMD $ !(S1);
      .OR. &TERMD $ !(S2);
      .OR. &TERMD $ !(S3);
      .OR. &TERMD $ !(S4);
      .OR. &TERMD $ !(S5);
      .OR. &TERMD $ !(S6)
    STORE T TO D
  ENDIF
ELSE
  IF &TERMD $ !(&FIELDD)
    STORE T TO D
  ENDIF
ENDIF
ENDIF

&LOGIC
WAIT
READ
ENDIF
SKIP
ENDDO
SET FORMAT TO
USE
? "END OF FILE ENCOUNTERED"

```

```

*=====*
* Format File: XONE.FMT                                     *
* Function: Format file for entry of terms/fields.         *
* Called By: Xfind.cmd                                     *
* Version: 1.0                                             *
*=====*

```

```

@ 1, 1 SAY
"-----"
@ 2, 1 SAY "File"
@ 2, 7 SAY FILE
@ 4, 1 SAY "Enter:  Item      Field          Term"
@ 5,11 SAY "A"
@ 5,16 GET FIELDA
@ 5,30 GET TERMA
@ 6,11 SAY "B"
@ 6,16 GET FIELDB
@ 6,30 GET TERMB
@ 7,11 SAY "C"
@ 7,16 GET FIELDC
@ 7,30 GET TERMC
@ 8,11 SAY "D"
@ 8,16 GET FIELDDD
@ 8,30 GET TERMD
@ 10, 1 SAY
"-----"
@ 11, 1 SAY "Fields: Class, Cutter, Workmark, Main:entry, Title, Auth:edit,
Place,"
@ 12, 9 SAY "Publisher  Date, Collate, Series, Notes, Subjects (1 TO 6)"
@ 13, 1 SAY
"-----"
@ 14, 1 SAY "Enter logic (Use parentheses, as required)"
@ 16, 1 GET LOGIC
@ 18, 1 SAY "Correct?"
@ 18,11 GET CORRECT
@ 18,24 SAY "('Y' If correction desired)"
@ 19, 1 SAY
"-----"
@ 20, 1 SAY "Logical Operators : .OR.  .AND.  .NOT."
@ 21, 1 SAY
"-----"

```

```

*=====*
* Format File: XTWO.FMT                                     *
* Function: Format file for display of citations.         *
* Called By: Xfind.cmd                                     *
* Version: 1.0                                             *
*=====*

```

```

@ 1, 0 SAY
"-----"
@ 2, 0 SAY "RECORD:"
@ 2, 8 SAY #
@ 2,20 SAY "CLASS"
@ 2,27 SAY CLASS
@ 2,39 SAY "CUTTER:"
@ 2,47 SAY CUTTER
@ 2,58 SAY "WORKMARK:"
@ 2,68 SAY WORKMARK
@ 3, 0 SAY "MAIN ENTRY:"
@ 3,12 SAY MAIN:ENTRY
@ 5, 0 SAY "TITLE:"
@ 5, 7 SAY TITLE
@ 7, 0 SAY "AUTHOR,EDITOR:"
@ 7,15 SAY AUTH:EDIT
@ 9, 0 SAY "PLACE:"
@ 9, 7 SAY PLACE
@ 10, 0 SAY "PUBLISHER:"
@ 10,11 SAY PUBLISHER
@ 12, 0 SAY "COLLATE:"
@ 12, 9 SAY COLLATE
@ 13, 0 SAY "DATE:"
@ 13, 6 SAY DATE
@ 14, 0 SAY "SERIES:"
@ 14, 8 SAY SERIES
@ 15, 0 SAY "NOTES:"
@ 15, 7 SAY NOTES
@ 17, 0 SAY "SUBJECTS:"
@ 17,10 SAY S1
@ 18,10 SAY S2
@ 19,10 SAY S3
@ 20,10 SAY S4
@ 21,10 SAY S5
@ 22,10 SAY S6

```

```

*=====*
* Command File: COPYFIND.CMD *
* Function: Searches bibliographic file for text string and copies citations *
*           into a new file. *
* Version: 1.0 *
*=====*

```

```

SET TALK OFF
ERASE
RELEASE ALL

```

\* Preliminary user help section.

```
?
? '-----'
? '          COPYFIND.CMD'
? '  Searches dBASE II bibliographic file for text string'
? '    and copies citations into a new retrieval file.'
? '-----'
?
ACCEPT 'Do you need instructions? (Y or N)?' TO INSTR
IF !(INSTR) = 'Y'
ERASE
?
? '1 - Fields searched include: main:entry, title, auth:edit'
? '    and subjects, (i.e. added entries).'
?
? '2 - A search "string" can be any alphanumeric character,'
? '    word, contiguous set of words, or parts of words,'
? '    (prefixes, stems, suffixes).'
?
? '3 - Responses to questions may be typed in upper or lower'
? '    case. The program capitalizes all text before searches'
? '    or other operations.'
?
? '4 - Follow all responses with a carriage return (CR).'
?
? '5 - To quit the program at any time, strike the escape (ESC)'
? '    key.'
?
? '6 - When the computer displays "WAITING" at the bottom of the'
? '    screen, strike any key to continue.'
?
WAIT
ENDIF
ERASE
STORE 'T' TO DATIN
DO WHILE DATIN = 'T'
? 'Enter letter designator of disk'
? '  containing dBASE II bibliographic files,'
? '  - usually "B" for floppy disks,'
? '  - or "D" for hard disk.'
? '  Do not use colon (:)'
?
ACCEPT 'Disk to be used ' TO DISK
STORE DISK+': ' TO DISK
ERASE
?
? 'Files available on this disk include:'
DISP FILES ON &DISK
ACCEPT 'Enter name of file to be searched ' TO FILE
USE &DISK&FILE
ERASE
```

```

?
? 'Enter new file name for copying records to.'
?
?
'-----CAUTION-----'
? 'DO NOT USE ANY EXISTING dBASE II FILE NAME.'
? 'The COPY command will overwrite an existing, '
? 'unopened file with the same name. Also, there'
? 'must be sufficient space left on the disk for'
? 'the new file, otherwise the program will abort'
? 'due to insufficient space.'
? '-----CAUTION-----'
?
ACCEPT 'Enter new file name for storing retrieved records ' to CPY
ERASE
?
ACCEPT 'Enter search string ' TO STRING
STORE !(STRING) TO STRING
ERASE
@ 1,2 SAY 'File to be searched is - '
@ 1,30 SAY '&DISK&FILE'
@ 2,2 SAY 'New file to copy to is - '
@ 2,30 SAY '&CPY','&.DBF'
@ 3,2 SAY 'Search string is - '
@ 3,30 say '&STRING'
?
ACCEPT 'Is this correct (Y or N)?' TO CHECK
STORE !(CHECK) TO CHECK
  IF CHECK <> 'Y'
    ERASE
    LOOP
  ELSE
    STORE 'F' TO DATIN
  ENDIF
ENDDO
ERASE

* Search and copy.

? 'SEARCH IN PROGRESS - PLEASE WAIT'
DO WHILE .NOT. EOF
  COPY TO &CPY FOR STRING $ !(MAIN:ENTRY) .OR. STRING $ !(TITLE);
  .OR. STRING $ !(AUTH:EDIT) .OR. STRING $ !(S1) .OR. STRING $ !(S2);
  .OR. STRING $ !(S3) .OR. STRING $ !(S4) .OR. STRING $ !(S5);
  .OR. STRING $ !(S6)
SKIP
ENDDO

* Close and display files, end program.

? 'END OF FILE ENCOUNTERED'
DISP FILES
? 'RETURN TO DBASE II'

```

```

*=====*
* Subsidiary Command File: BRLIST.CMD *
* Function: Prints out call numbers and citations from a bibliographic file. *
* Calls: Brlist2.cmd, Brlist3.cmd, and Card1.cmd *
* Version 1.0 *
*=====*

```

```

RELEASE ALL
ERASE
SET TALK OFF
?

```

```

? '-----'
? '          Program BRLIST.CMD  V. 1.0'
? '-----'
? 'Prints out call numbers and citations from a dBASE II '
? 'bibliographic file on a NEC Spinwriter. Programs BRLIST2.CMD,'
? 'BRLIST3.CMD, and CARD1.CMD are called and must be available.'
? 'Fields printed include: class, cutter, workmark, main:entry,'
? 'title, auth:edit, publisher, date, and collate.'
?
? 'Set up NEC Spinwriter as follows:'
? '  Form length = 66'
? '  Line feed = 6 (switch down)'
? '  Character spacing = 12 (switch up)'
? '  Use 12 pitch typing element'
? '  Turn NEC Spinwriter on'
?
STORE ' ' TO DISK

```

\* If desired, option for displaying files.

```

ACCEPT 'Do you want to see what dBASE II files are available? (Y or N)? ';
TO INSTR
If !(INSTR) = 'Y'
ERASE
? 'Enter letter designator of disk'
? '  containing dBASE II bibliographic files,'
? '  - usually "B" for floppy disks,'
? '  - or "D" for hard disk'
? '  - do not use colon (:)'
?
ACCEPT 'Disk to be used ' TO DISK
STORE DISK+':' TO DISK
ERASE
DISP FILES ON &DISK
ENDIF

```

\* Requests name of file to be used.

```

? 'Enter name of file to be used'
? '  File may be sequential or indexed, example:'
? '  FILENAME          (for sequential file)'
? '  FILENAME INDEX INDEXNAME (for indexed file)'
?
ACCEPT 'File to be used ' TO FILE
USE &DISK&FILE

```



\* Requests information for two line heading.

ERASE

```
? '-----'
? "ENTER FIRST LINE OF HEADING"
ACCEPT TO HEADER1
STORE (96-LEN(HEADER1)) / 2 TO COLH1
? "ENTER SECOND LINE OF HEADING"
ACCEPT TO HEADER2
STORE (96-LEN(HEADER2)) / 2 TO COLH2
STORE 1 TO NEWSTART
DO WHILE .NOT. EOF
  STORE 65 TO LINELEN
  STORE '11' TO LNO
ERASE
```

\* Information to be displayed on screen during program run.

```
? 'Processing data for printout - Please Wait'
? 'Record being processed -',#
```

\* Create citation in memory.

```
STORE TRIM(MAIN:ENTRY)+' '+TRIM(TITLE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LNO
STORE TRIM(&U)+'/' '+TRIM(AUTH:EDIT)+' -- '+TRIM(PLACE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LNO
STORE TRIM(&U)+' : '+TRIM(PUBLISHER)+' , '+TRIM(DATE)+'.' TO PRINT:FLD
DO CARD1
STORE str(&lno-1,2) to lno
STORE trim(&u)+ ' '+TRIM(COLLATE) TO PRINT:FLD
DO CARD1
STORE STR(&LNO-1,2) TO LASTLINE
```

\* Begin printing of page headers and citations.

```
IF NEWSTART = 0
  IF (VAL(LASTLINE)-10) + LINE >= 60
    @ 62,47 SAY PAGE
    STORE PAGE + 1 TO PAGE
    EJECT
    @ 5,COLH1 SAY HEADER1
    @ 6,COLH2 SAY HEADER2
    STORE 6 TO LINE
  ENDIF
ENDIF
DO BRLIST2
SKIP
ENDDO
@ 62,35 SAY PAGE
ERASE
? 'END OF PROCESSING'
```

```

*=====*
* Subsidiary Command File: BRLIST2.CMD *
* Function: Prints page headers and citations. *
* Called By: Brlist.cmd *
* Version: 1.0 *
*=====*

```

ERASE

```

IF NEWSTART = 1
  SET FORMAT TO PRINT
  @ 5,COLH1 SAY HEADER1
  @ 6,COLH2 SAY HEADER2
  STORE 1 TO PAGE
  STORE 8 TO LINE
  STORE 0 TO NEWSTART

```

ENDIF

```

STORE '11' TO LNO
STORE LINE + 1 TO LINE

```

\* Print first three lines of citation.

```

DO BRLIST3
@ line,12 SAY CLASS
@ LINE,19 SAY &U
DO BRLIST3
@ line,12 SAY CUTTER
@ LINE,20 SAY &U
DO BRLIST3
@ line,12 SAY WORKMARK
@ LINE,20 SAY &U

```

\* Print remainder of citation.

```

DO WHILE VAL(LNO) <= VAL(LASTLINE)
  DO BRLIST3
    @ LINE,20 SAY &U
ENDDO
RETURN

```

```

*=====*
* Subsidiary Command File: BRLIST3.CMD *
* Function: Line counter. *
* Called By: Brlist2.cmd *
* Version: 1.0 *
*=====*

```

```

store 'line'+lno to u
store line+1 to line
Store str(&lno+1,2) to lno
RETURN

```

```

*=====*
* Command File: GSLIST.CMD *
* Function: Prints out bibliographic citations in USGS format. *
* Calls: Gscount.cmd *
* Version: 1.0 *
*=====*

```

```

RELEASE ALL
ERASE
SET TALK OFF
RELEASE ALL

```

```

? '-----'
? '          GSLIST.CMD          '
? '-----'
? 'Prints out bibliographic citations in "Suggestions To Authors"'
? 'format. Does not print out series, notes, or added entries.'
?
? 'Uses a NEC Spinwriter. Set line length to 66. Set line feed'
? '(LF) to 6 (switch down), spacing (SP) to 12 (switch up).'
? 'Use a 12 pitch typing element.'
?
? 'Note: Programs CARD1.CMD and GSCOUNT.CMD are called'
? 'and must be available.'
?
? '-----'
?

```

\* If desired, option for displaying available files.

```

STORE ' ' TO DISK
ACCEPT 'Do you want to see what dBASE II files are available? (Y or N)? ' ;
TO INSTR
IF !(INSTR) = 'Y'
ERASE
? 'Enter letter designator of disk'
? ' containing dBASE II bibliographic files,'
? ' - usually "B" for floppy disks,'
? ' - or "D" for hard disk'
? ' - Do not use colon (:)'
?
ACCEPT 'Disk to be used ' TO DISK
STORE DISK+':' TO DISK
ERASE
DISP FILES ON &DISK
ENDIF

```

\* Request name of file to be used.

```

? 'Enter name of file to be used'
? ' File may be sequential or indexed, example:'
? ' FILENAME (for sequential file)'
? ' FILENAME INDEX INDEXNAME (for indexed file)'
?

```

ACCEPT 'File to be used ' TO FILE  
USE &DISK&FILE  
ERASE

\* Request information for two lines of heading.

? 'ENTER FIRST LINE OF HEADING'  
ACCEPT TO HEADER1  
STORE (96-LEN(HEADER1)) / 2 TO COLH1  
? 'ENTER SECOND LINE OF HEADING'  
ACCEPT TO HEADER2  
STORE (96-LEN(HEADER2)) / 2 TO COLH2

\* Begin printout sequence

ERASE  
? ' PRINTOUT IN PROGRESS - PLEASE WAIT'  
SET EJECT OFF  
SET FORMAT TO PRINT  
@ 5,COLH1 SAY HEADER1  
@ 6,COLH2 SAY HEADER2  
STORE 0 TO PAGE  
STORE 8 TO LINE  
STORE 0 TO NEWSTART  
STORE ' 0' TO NUMBER

\* Format citation in memory.

DO WHILE .NOT. EOF  
STORE 65 TO LINELEN  
STORE '11' TO LNO  
STORE TRIM(MAIN:ENTRY)+', '+TRIM(DATE) TO PRINT:FLD  
DO CARD1  
STORE STR(&LNO-1,2) TO LNO  
STORE &U+', '+TRIM(TITLE) TO PRINT:FLD  
DO CARD1  
STORE STR(&LNO-1,2) TO LNO  
STORE &U+': '+TRIM(PLACE)+', '+TRIM(PUBLISHER)+', '+TRIM(COLIATE) TO PRINT:FLD  
DO CARD1  
STORE STR(&LNO-1,2) TO LNO  
STORE VAL(LNO) TO LASTLINE

\* Begin printout.

IF (LASTLINE-10) + LINE >= 60  
STORE PAGE + 1 TO PAGE  
@ 62,47 SAY PAGE  
EJECT  
@ 5,COLH1 SAY HEADER1  
@ 6,COLH2 SAY HEADER2  
STORE 8 TO LINE  
ENDIF

```

STORE '10' TO LNO
STORE 11 TO COUNT
STORE LINE + 1 TO LINE
STORE STR(&NUMBER+1,3) TO NUMBER
DO GSCOUNT
@ LINE,14 SAY NUMBER+'. '
@ LINE,20 SAY &U
DO WHILE LASTLINE >= COUNT
    DO GSCOUNT
    @ LINE,23 SAY &U
ENDDO
SKIP
ENDDO
ERASE
? 'END OF PRINTOUT'

```

```

*=====*
* Subsidiary Command File: GSCOUNT.CMD *
* Function: Line counter. *
* Called By: Gslist.cmd *
* Version: 1.0 *
*=====*

```

```

store str(&lno+1,2) to lno
store 'LINE'+lno to u
store line+1 to line
store count+1 to count
RETURN

```